



ASSOCIATED  
ENVIRONMENTAL  
GROUP, LLC

May 1, 2013

Ms. Sue Smith  
R.H Smith Distributing Company  
315 East Wine Country Road  
Grandview, Washington 98930-1044

RE: **May 2013 Quarterly Groundwater Sampling Results**  
Smitty's Conoco #140 – Toppenish (Former Spirit Gas Station)  
EPA Facility Identification No. 4260087  
102 East Toppenish Avenue  
Toppenish, Washington 98948

Dear Ms. Smith:

Associated Environmental Group, L.L.C. (AEG) has prepared this letter to provide you with the results from the May 2013 quarterly groundwater sampling at the Smitty's Conoco #140 – Toppenish (Former Spirit Gas Station) property, located at 102 East Toppenish Avenue in Toppenish, Washington (the Site).

### **Sampling**

On May 1, 2013, AEG sampled eight groundwater monitoring wells at the Site. One well is located on the Smitty's Conoco #140 – Toppenish (Former Spirit Gas Station) property and seven wells are located off of the property. The wells sampled were:

#### On-Property Well:

- MW-1W

#### Off-Property Wells:

- MW-4W
- MW-5W
- MW-6W
- MW-7W
- MW-8W
- MW-9W
- MW-10W

At each well, a depth to water measurement was obtained and each well assessed for the presence of potential light non-aqueous phase liquid (LNAP) i.e. free product. Each well was then sampled following industry standard low-flow purging and sampling techniques. The samples were collected in laboratory provided containers and placed in a portable chilled ice chest for transport to Libby Environmental, Inc., a Washington State accredited environmental laboratory, for analysis. The samples were analyzed for gasoline range total petroleum hydrocarbons (TPH) and the fuel associated volatile organic compounds benzene, toluene, ethylbenzene, and total xylenes (BTEX).



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## Results

The results from the analysis as well as the historical analytical results are presented in the attached Table 1 - *Summary of Groundwater Analytical Results*. The results show that in monitoring wells MW-1 and MW-7, the concentrations of TPH have increased and remain above cleanup levels. In MW-1 the concentration rose from 839 ug/l in January 2013 to 1,130 ug/l in May 2013, while in MW-7 the concentration rose from 65,700 ug/l in January 2013 to 68,800 in May 2013. Additionally, the concentration of TPH in monitoring wells MW-4 and MW-5 have decreased slightly but are relatively stable. In MW-4, the concentration of TPH decreased from 24,700 ug/l in January 2013 to 24,500 ug/l in May 2013, while in MW-5, the concentration decreased from 3,100 ug/l in January 2013 to 3,050 ug/l in May 2013. However, both concentrations remain above the MTCA Method A cleanup level of 800 ug/l for samples containing TPH.

BTEX concentrations appear to have decreased in all of the wells with TPH, except for ethylbenzene in MW-1 which increased from being non-detectable at 1.0 ug/l to being detected at 1.33 ug/l. This is below the MTCA Method A cleanup level of 700 ug/l. BTEX and TPH continue to not be detected in monitoring wells MW-6, MW-8, MW-9, and MW-10.

## Closing

Thank you for the opportunity to provide you with environmental consulting services. Should you have questions or require additional information, please do not hesitate to contact me at 360-352-9835. An electronic copy of this document has also been emailed to you.

Sincerely,

**Associated Environmental Group, LLC**

David R. Polivka L.G./L.Hg.  
Senior Project Hydrogeologist

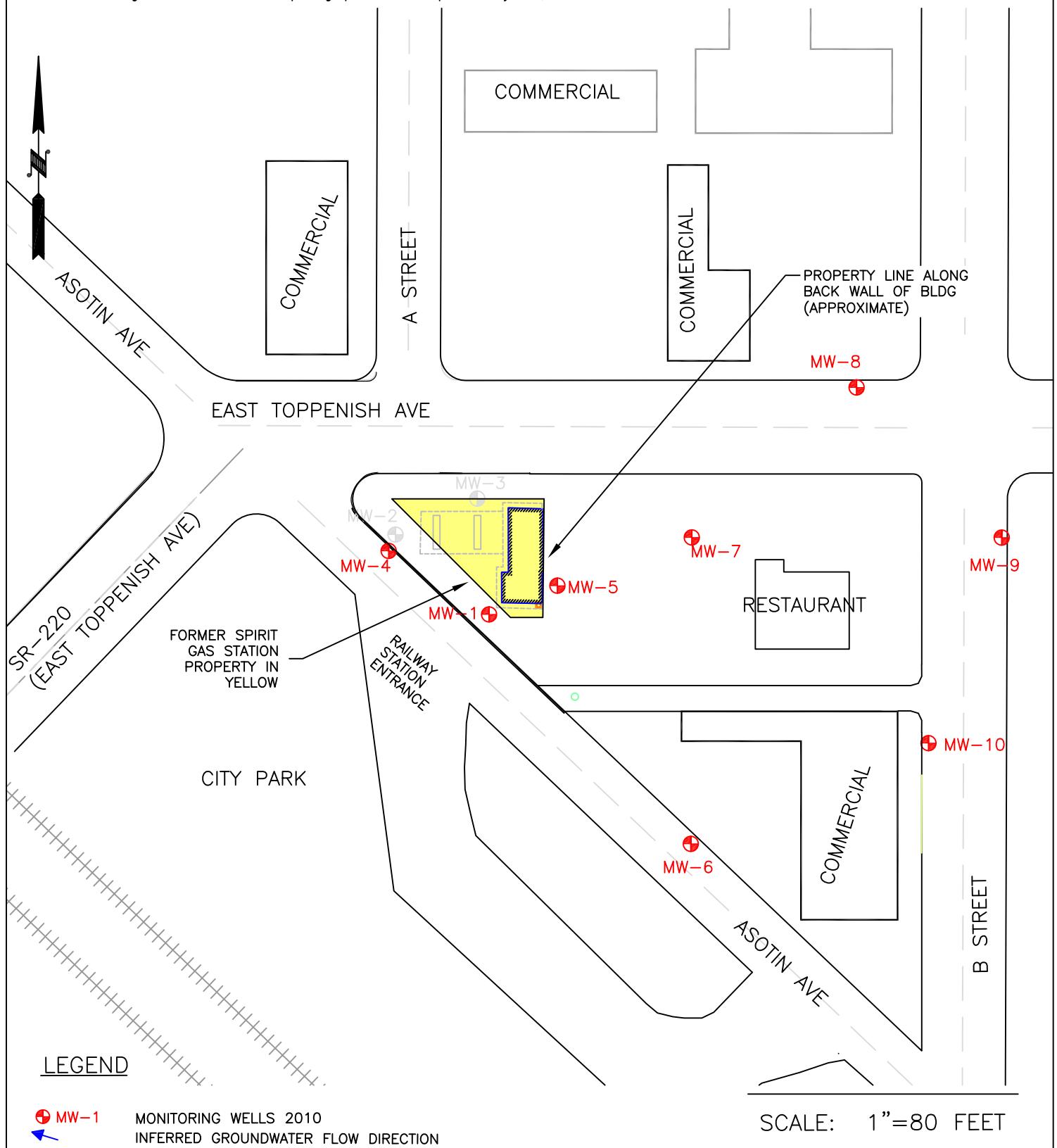
Cc: Rob Rau – EPA Region X

Attachments: Figure 1 – Site Map  
Table 1 - Summary of Groundwater Analytical Results

Notes:

- (1) The locations of all features shown are approximate.
- (2) This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document.

Reference: Drawing created from satellite photograph and notes provided by AEG, LLC.



**Table 1 Summary of Groundwater Analytical Results**  
**Former Smitty Conoco #140 (Former Spirit Gas Station)**  
**Toppenish, WA**

Well Number <sup>1</sup>	Date Sampled	Gasoline TPH <sup>2</sup> (ug/L)	Table 830-1 GRO Volatile Organic Constituents <sup>3</sup> (ug/L)							Total Lead <sup>5</sup> (ug/L)	Diesel TPH Extended <sup>4</sup> (ug/L)		
			Benzene	Toluene	Ethylbenzene	Total Xylenes	EDC	EDB	Total Naphthalenes		Diesel	Heavy Oil	Mineral Oil
MW-1	9/8/2009	657	<b>64.4</b>	21.7	<1.0	39.5	--	--	--	--	--	--	--
	10/13/2009 <sup>8</sup>	--	<b>58</b>	2.6	23	9.0	--	--	--	--	--	--	--
	2/1/2011	<100	<1.0	<1.0	2.2	7.2	<1.0	<0.01	<5.0	<5.0	--	--	--
	5/18/2011	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<0.01	<5.0	<5.0	--	--	--
	2/18/2012	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<0.01	<5.0	<5.0	--	--	--
	7/18/2012	<100	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
	10/23/2012	<100	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--	--	--
	1/29/2013	<b>839</b>	1.5	<2.0	<1.0	5.6	--	--	--	--	--	--	--
	5/1/2013	<b>1,130</b>	<1.0	<2.0	1.33	2.34	--	--	--	--	--	--	--
MW-2 <sup>7</sup>	9/8/2009	108	2.3	3.2	<1.0	5.8	--	--	--	--	--	--	--
	10/13/2009 <sup>8</sup>	--	<b>14</b>	10	31	130	--	--	--	--	--	--	--
MW-3 <sup>7</sup>	9/8/2009	<b>84,900</b>	<b>2,500</b>	<b>4,800</b>	639	<b>7,450</b>	--	--	--	--	--	--	--
	10/13/2009 <sup>8</sup>	--	<b>1,500</b>	<b>3,600</b>	440	<b>4,100</b>	--	--	--	--	--	--	--
MW-4	2/1/2011	<b>18,800</b>	<b>22.4</b>	62.8	435	<b>2,730</b>	<1.0	<0.01	115	<5.0	<5.0	--	--
	5/18/2011	<b>6,880</b>	<b>13.9</b>	15.9	<1.0	688	<1.0	<0.01	10.8	<5.0	<5.0	--	--
	2/18/2012	<b>19,500</b>	<b>25.3</b>	38.2	119	<b>1,060</b>	<1.0	0.06	<b>278</b>	<5.0	<5.0	--	--
	7/18/2012	<b>21,500</b>	<b>45.2</b>	37.0	292	<b>1,690</b>	--	--	--	--	--	--	--
	10/23/2012	<b>7,070</b>	<b>35.6</b>	15.2	142	251	--	--	--	--	--	--	--
	1/29/2013	<b>24,700</b>	<b>44</b>	43	397	<b>1,100</b>	--	--	--	--	--	--	--
	5/1/2013	<b>24,500</b>	<b>25.6</b>	24	364	928	--	--	--	--	--	--	--
MW-5	2/1/2011	<b>10,100</b>	<b>11.9</b>	5.6	186	242	<1.0	<0.01	155	<5.0	<5.0	<200	<400
	5/18/2011	<b>1,790</b>	<1.0	<1.0	<1.0	4.1	<1.0	<0.01	5.4	<5.0	8.2	<200	<400
	2/18/2012	<b>2,010</b>	1.8	3.8	2.4	4.3	<1.0	<0.01	<5.0	<5.0	--	--	--
	7/18/2012	180	1.2	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
	10/23/2012	<100	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--	--	--
	1/29/2013	<b>3,100</b>	<b>8.4</b>	<2.0	21	37	--	--	--	--	--	--	--
	5/1/2013	<b>3,050</b>	.94	<2.0	1.89	<2.0	--	--	--	--	--	--	--
MW-6	2/1/2011	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<0.01	<5.0	<5.0	--	--	--
	5/18/2011	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<0.01	<5.0	<5.0	--	--	--
	2/18/2012	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<0.01	<5.0	<5.0	--	--	--
	7/18/2012	<100	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
	10/23/2012	<100	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--	--	--
	1/29/2013	<100	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--	--	--
	5/1/2013	<100	<1.0	<2.0	<1.0	<2.0	--	--	--	--	--	--	--
MW-7	2/1/2011	<b>42,300</b>	<b>215</b>	692	<b>1,570</b>	<b>11,500</b>	<1.0	<0.01	<b>311</b>	<5.0	7.9	<200	<400
	5/18/2011	<b>68,200</b>	<b>90.5</b>	120	411	<b>15,500</b>	<1.0	<0.01	<b>1,540</b>	<5.0	11.5	<200	<400
	2/18/2012	<b>38,600</b>	<b>61.5</b>	53.8	234	<b>6,760</b>	<1.0	<0.01	<b>364</b>	<5.0	<b>26.7</b>	--	--
	7/18/2012	<b>37,100</b>	<b>124</b>	165	626	<b>9,370</b>	--	--	--	--	--	--	--
	10/23/2012	<b>59,700</b>	<b>293</b>	150	502	<b>4,600</b>	--	--	--	--	--	--	--
	1/29/2013	<b>65,700</b>	<b>84</b>	140	478	<b>5,730</b>	--	--	--	--	--	--	--
	5/1/2013	<b>68,800</b>	<b>23</b>	31	323	<b>1,790</b>	--	--	--	--	--	--	--
MW-8	2/1/2011	<b>1,440</b>	<1.0	2.2	18.6	164	<1.0	<0.01	35.0	<5.0	<5.0	--	--
	5/18/2011	<100	<1.0	1.4	<1.0	4.8	<1.0	<0.01	16.8	<5.0	<5.0	--	--
	2/18/2012	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<0.01	<5.0	<5.0	<b>43.2</b>	--	--
	7/18/2012	380	1.4	2.1	<1.0	39.9	--	--	--	--	--	--	--
	10/23/2012	<100	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--	--	--
	1/29/2013	<100	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--	--	--
	5/1/2013	<100	<1.0	<2.0	<1.0	<2.0	--	--	--	--	--	--	--
MW-9	2/1/2011	660	<b>9.0</b>	<1.0	9.2	24.7	<1.0	<0.01	<5.0	<5.0	8.6	--	--
	5/18/2011	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<0.01	<5.0	<5.0	--	--	--
	2/18/2012	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<0.01	<5.0	<5.0	--	--	--
	7/18/2012	<100	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
	10/23/2012	<100	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--	--	--
	1/29/2013	<100	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--	--	--
	5/1/2013	<100	<1										

**Table 1 Summary of Groundwater Analytical Results**  
**Former Smitty Conoco #140 (Former Spirit Gas Station)**  
**Toppenish, WA**

Well Number <sup>1</sup>	Date Sampled	Gasoline TPH <sup>2</sup> (ug/L)	Table 830-1 GRO Volatile Organic Constituents <sup>3</sup> (ug/L)							Total Lead <sup>5</sup> (ug/L)	Diesel TPH Extended <sup>4</sup> (ug/L)		
			Benzene	Toluene	Ethylbenzene	Total Xylenes	EDC	EDB	Total Naphthalenes		Diesel	Heavy Oil	Mineral Oil
MW-10	2/1/2011	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<0.01	<5.0	<5.0	<5.0	--	--
	5/18/2011	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<0.01	<5.0	<5.0	<5.0	--	--
	2/18/2012	<100	<1.0	<1.0	<1.0	<1.0	<1.0	<0.01	<5.0	<5.0	<5.0	--	--
	7/18/2012	<100	<1.0	<1.0	<1.0	<1.0	--	--	--	--	--	--	--
	10/23/2012	<100	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--	--	--
	1/29/2013	<100	<1.0	<2.0	<1.0	<3.0	--	--	--	--	--	--	--
	5/1/2013	<100	<1.0	<2.0	<1.0	<2.0	--	--	--	--	--	--	--
PQL		100	1.0	1.0 or 2.0	1.0	1.0 or 3.0	1.0	0.01	5.0	5.0	5.0	200	400
Ecology MTCA Method A Clean Up Levels		800 <sup>6</sup>	5	1,000	700	1,000	5	0.010	160	20	15	500	500

**Notes:**

<sup>1</sup>Monitoring well locations are shown on Figure 1

<sup>2</sup>Gasoline range total petroleum hydrocarbons (TPH). Analyzed by Northwest Method NWTPH-Gx.

<sup>3</sup>Select Volatile Organic Compounds in gasoline range organics (GRO) per Table 830-1. Analyzed by EPA Method 8260B.

<sup>4</sup>Analyzed by Northwest Method NWTPH-Dx/Dx Extended

<sup>5</sup>Analyzed by EPA Method 7421

<sup>6</sup>Cleanup level with presence of benzene

<sup>7</sup>Monitoring wells decommissioned in 2009 due to UST removal/soil excavation activities.

<sup>8</sup>Groundwater results from White Shield, Inc.'s and US EPA's sampling activities.

Bold indicates the detected concentration exceeds Ecology MTCA Method A cleanup level

EDC = 1,2-Dichloroethane

EDB = 1,2-Dibromoethane

MTBE = methyl tertiary-butyl ether

PQL = Practical Quantification Limit

MTCA = Model Toxics Control Act

ug/L= micrograms per liter

-- = not analyzed for constituent

< = not detected above laboratory limits